

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph beginning at page 62, line 21, with the following rewritten paragraph:

Figure 2 shows Figures 2A and 2B show an *Mlo* coding sequence and encoded amino acid sequence according to the present invention (SEQ ID NOs:1 and 2). The amino acid sequence predicted from DNA sequences of RT-PCR products from Ingrid *Mlo* are shown. Nucleotide numbers are given according to translational start site.

Please replace the paragraph beginning at page 63, line 10, with the following rewritten paragraph:

Figure 4 Figures 4A and 4B Southern Blot Analysis of Intragenic Recombinants derived from *mlo* heteroallelic crosses. The alleles of two RFLP markers flanking *Mlo* on opposite sides of either susceptible F₂ individuals or homozygous susceptible and homozygous resistant progeny were determined by Southern blot analysis. Plant DNA (10 µg) of the individuals were digested with *Pst* I (A) or *Hae* III (B) and hybridized with the radioactively labeled RFLP markers WG114 (upper panel; maps 3.1 cM in centromeric orientation to *Mlo*; see Figure 1) and ABG366 (lower panel; maps 0.7 cM in telomeric orientation to *Mlo*; see Figure 1) according to standard procedures (Sambrook *et al.*, 1989).

Please replace the paragraphs beginning at page 64, line 14, with the following rewritten paragraphs:

Figure 5 shows Figures 5A-5C show an alignment of genomic sequences covering the barley *Mlo* gene and a rice homologue isolated via crosshybridization with a barley gene specific probe (SEQ ID NOs:3 and 4). The top line shows the barley *Mlo* genomic DNA sequence (exon sequences underlined). The bottom line shows the rice genomic sequence containing the rice *Mlo* homologue.

Figure 6 shows Figures 6A-6D show an alignment of genomic sequences carrying the barley *Mlo* gene and a barley homologue isolated via crosshybridization with a barley gene specific probe (SEQ ID NOs:5 and 6). The top line shows the barley *Mlo* genomic DNA sequence (exon sequences underlined). The bottom line shows the genomic sequence containing the barley *Mlo* homologue.

Please replace the paragraphs beginning at page 65, line 14, with the following rewritten paragraphs:

Figure 8 shows Figures 8A-8E show genomic sequence of rice (*Oryza sativa*) homologue including coding and flanking sequences (SEQ ID NO:9).

Figure 9 shows Figures 9A-9C show genomic sequence of barley (*Hordeum vulgare*) homologue including coding and flanking sequences (SEQ ID NO:10).

Figure 10 shows cDNA sequence of rice homologue.

Figure 11 (SEQ ID NO:12) shows cDNA sequence of barley homologue (SEQ ID NO:11).

Figure 12 shows Figures 12A and 12B show cDNA sequence of Arabidopsis thaliana homologue (SEQ ID NO:13).

Figure 13 shows amino acid sequence of rice homologue (SEQ ID NO:14).

Figure 14 shows amino acid sequence of barley homologue (SEQ ID NO:15).

Figure 15 shows amino acid sequence of Arabidopsis homologue (SEQ ID NO:16).

Figure 16 shows Figures 16A and 16B show a pretty box of amino acid sequences of Mlo, barley, rice and Arabidopsis homologues (SEQ ID NOs:17-19).